

Conventional P25 Features Matrix User List

10/25/2007 -

M = Mandatory
SO-R = Standard Option Required
SO = Standard Option



Feature Name	Requirement Level	Standards Documents	Comments
Voice Calls			
Unaddressed Voice Call	M	102A	
Group Voice Call	SO	102A, AABC-B, AABD	May also be referred to as Unit to Group Call
Individual Voice Call	SO	102A, AABC-B, AABD	May also be referred to as Unit to Unit Call
Discreet Listening	SO	102A	
Call Interrupt	SO	102A	
Monitor Squelch	M	102A, BAAD, CABA	
Normal Squelch	SO	BAAD, CABA	
Selective Squelch	SO	BAAD, CABA	
System Call	SO	AABC-B, AABD, CABA, BAAD	May also be referred to as (ALL) System Call, System Wide TG Call
Mobility Management			
TBD			
Encryption			
Block Encryption	SO	AAAD, AACA	May also be referred to as Encryption or Encrypted Audio
DES-OFB Encryption of Voice	SO-R	102A, AAAD	For Backward compatibility only. Not encouraged for new systems
DES-OFB Encryption of Packet Data	SO-R	102A, AAAD	For Backward compatibility only. Not encouraged for new systems
AES Encryption of Voice	SO	AAAD	
AES Encryption of Packet Data	SO	AAAD	
Multiple Encryption Algorithms	SO	AAAD, AACA	
Multiple Encryption Keys	SO	AAAD, AAAA-A	
Encryption Key Update	SO	102A	May also be referred to as Encryption Update
Over The Air Rekeying (OTAR)	SO	102A, AACA, AACB, AACD	Contains 23 sub-options listed in AACA
Manual Rekeying Features	SO	102A, AACD	12 sub-options listed in AACD. Also referred to as Physical Key Management.
Supplementary Services			
Call Alerting	SO	102A, AABC-B, AABD, AABG, BACD	May also be referred to as Call Alert, Unit Page
Pre-programmed Data Messaging / Short Message	SO	102A, AABD, AABC-B, AABF-A, AABG, AABA-A, BACD	May also be referred to as Short Message, Short Data Message, Message
Silent Emergency	SO	102A, CABA	
Radio Unit Monitoring	SO	102A, AABG, AABC-B, BACD	May also be referred to as Radio Unit Monitor
Emergency Alarm	SO	102A, AABC-B, AABD, AABG, BACD	May also be referred to as Emergency Alert, Emergency Indications, Emergency
Emergency Call	SO	BAAD, AABF-A	May also be referred to as Emergency Group Call
Extended Functions			
Radio Unit Inhibit* / Disable	SO	102A, AABC-B, AABD, AABG	
Radio Unit Uninhibit* / Re-enable	SO	102A, AABC-B, AABD, AABG	
Radio Check	SO	AABD, AABC-B, AABG	
Miscellaneous			
Talking Party Identification	SO	102A	May also be referred to as Caller Identification or Caller-ID
Common Air Interface (U_m)			
CAI	M	102A, BAAA-A	
Phase 1			
Enhanced Full Rate Vocoder	M	102A, BABA	Also referred to as P25 Defined Vocoder: Enhanced Version required in new products
12.5 kHz Channel Bandwidth	M	102A, BAAA-A	
Frequency Division Multiple Access (FDMA)	M	102A, BAAA-A, AABA-A	
C4FM and CQPSK Modulation	M	102A, BAAA-A	Older products may have only C4FM
9.6 kbps Gross Bit Rate	M	102A, BAAA-A	
Backwards Compatibility (Analog FM Operation)	M	102A, ANSI/TIA/EIA-603 Compliance	
Inter RF Sub-System Interface (G)			
TBD			
Data Interfaces (A and E_g)			
Data Interfaces (A and E _g)	SO	102A	
Data Configuration - Radio to FNE	SO	BAEB-A, BAEB, BAEB-2	May also be referred to as Mobile to Fixed Host Service (FNE Data)
Data Configuration - Radio to Radio (Direct)	SO	BAEB-A, BAEB, BAEB-2	May also be referred to as Mobile to Mobile Service (Direct)
Data Configuration - Radio to Radio (Repeated)	SO	BAEB-A, BAEB, BAEB-2	May also be referred to as Mobile to Mobile Service (Repeated Data)
Packet Switched Confirmed Delivery Data	SO	BAEB-A	
Packet Switched Data Network Access	SO	BAEB-A	
RCP (Radio Control Protocol)	SO	BAEE-A, BAEB-A	Used for Radio Management Protocol
SNMP (Simple Network Management Protocol)	SO	BAEE-A, BAEB-A	Used for Radio Management Protocol
SCEP (Simple CAI Encapsulation Protocol)	SO	BAEB-A	
SNDCP (Subnetwork Dependent Convergence Protocol)	SO	BAEB-A	

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Link Layer and Physical Layer Protocols	SO	BAEA-A, BAEB-A	
Telephone Interconnect Interface (E_i)			
Telephone Interconnect	SO	102A, BADA	Contains 33 sub-options listed in BADA. May also be referred to as Voice Telephone
Fixed Station Interface (E_f)			
FSI	SO	102A, BAHA, CADA	
Analog			
Transport of Clear Audio	SO-R	BAHA, CADA	
Tone Remote Control (TRC)	SO-R	BAHA, CADA	
Intercom	SO	BAHA, CADA	
E&M Signaling	SO	BAHA, CADA	
Digital			
IP Capabilities	SO-R	BAHA, CADA	
Block Encryption	SO-R	BAHA, CADA	May also be referred to as Encryption, Encrypted Audio
Talking Party Identification	SO-R	BAHA, CADA	May also be referred to as Caller Identification, Caller-ID
Talkgroup Information	SO-R	BAHA, CADA	
NAC Information	SO-R	BAHA, CADA	
Emergency Alert	SO-R	BAHA, CADA	May also be referred to as Emergency Alarm
Emergency Indications	SO-R	BAHA, CADA	May also be referred to as Emergency Alarm
Frequency of Operation Control	SO-R	BAHA, CADA	
Repeating Voice Control	SO-R	BAHA, CADA	
Receiver Squelch Control	SO-R	BAHA, CADA	
Ethernet 100 Base-T with RJ-45 connector	SO-R	BAHA	
Received Voter Information	SO	BAHA, CADA	
Intercom	SO	BAHA, CADA	
Console Sub-System Interface (E_c)			
TBD			
Network Management Interface (E_n)			
TBD			